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DKT02152 (BWA 0245 PA)

In the claims:

1. Cancelled.
2. Cancelled.
3. Cancelled.
4. Cancelled.
5. Cancelled.
6. Cancelled.
7. Cancelled.
8. Cancelled.
9. Cancelled.
10. Cancelled.
11. Cancelled.
12. Cancelled.
13. Cancelled.
14. Cancelled.
15. Cancelled.

16. (Previously Presented) A hydraulically controlled fan drive system comprising:

a housing assembly containing a hydraulic fluid;

an engaging circuit coupled to said housing assembly and comprising;

a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid;

a hydraulic fluid flow controller coupled to said first pitot tube and controlling fluid pressure to said engaging circuit; and

a main controller coupled to said hydraulic fluid flow controller and engaging the system to derate a vehicle engine;

said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube.

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17. Cancelled.

18. (Previously Presented) A hydraulically controlled fan drive system comprising:

a housing assembly containing a hydraulic fluid;

an engaging circuit coupled to said housing assembly and comprising;

a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid; and

a variable cooling circuit comprising a second pitot tube coupled within said housing assembly and supplying said hydraulic fluid to and cooling said engaging circuit;

said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube.

19. Cancelled.

20. Cancelled.

21. Cancelled.

22. Cancelled.

23. Cancelled.

24. Cancelled.

25. Cancelled.

26. Cancelled.

27. (Currently Amended) A hydraulically controlled fan drive system comprising:

a housing assembly containing hydraulic fluid within a hydraulic fluid reservoir;

a piston assembly comprising;

a piston housing; and

a piston translating in response to applied hydraulic fluid pressure; and

an engaging circuit comprising;

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a clutch plate assembly coupled to said housing assembly and to a fan shaft and having a plurality of clutch plates; and

a first pitot tube comprising a plurality of branches and coupled within said housing assembly, contained within said hydraulic fluid reservoir, and supplying said hydraulic fluid to apply pressure on said piston and engage said clutch plates;

said plurality of branches comprising:

a piston branch directing at least a portion of said hydraulic fluid to said piston; and

a control branch directing at least a portion of said hydraulic fluid away from said piston.

28. Cancelled.

29. Cancelled.

30. Cancelled.

31. (New) A hydraulically controlled fan drive system comprising:

(a) a housing assembly containing a hydraulic fluid; and

(b) an engaging circuit coupled to said housing assembly and comprising;

a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid;

(c) said hydraulic fluid flow controller electronically or both electronically and mechanically adjusting fluid pressure to said engaging circuit; and

(d) said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube and variably controlling fluid pressure to said pitot tube via said hydraulic fluid flow controller.

32. (New) A hydraulically controlled fan drive system comprising:

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- (a) a housing assembly containing a hydraulic fluid; and
- (b) an engaging circuit coupled to said housing assembly and comprising:
 - a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid; and
 - a hydraulic fluid flow controller coupled to said first pitot tube;
- (c) said hydraulic fluid flow controller when not receiving power is in a closed state;
- (d) said system being defaulted to an engaged state when said hydraulic fluid flow controller is in said closed state by increase in fluid pressure to said engaging circuit; and
- (e) said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube and variably controlling fluid pressure to said pitot tube via said hydraulic fluid flow controller.

33. (New) A hydraulically controlled fan drive system comprising:

- (a) a housing assembly containing a hydraulic fluid; and
- (b) an engaging circuit coupled to said housing assembly and comprising:
 - a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid; and
 - a hydraulic fluid flow controller coupled to said first pitot tube;
- (c) a main controller coupled to said hydraulic fluid flow controller and generating a cooling signal;
- (d) said hydraulic fluid flow controller adjusting fluid flow pressure in response to said cooling signal; and

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(e) said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube and variably controlling fluid pressure to said pitot tube via said hydraulic fluid flow controller.

34. (New) A hydraulically controlled fan drive system comprising:

(a) a housing assembly containing a hydraulic fluid; and

(b) an engaging circuit coupled to said housing assembly and comprising;

a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid; and

a hydraulic fluid flow controller coupled to said first pitot tube;

(c) a temperature sensitive device sensitive to a temperature within said housing assembly and selectively preventing flow of hydraulic fluid within said first pitot tube; and

(d) said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube and variably controlling fluid pressure to said pitot tube via said hydraulic fluid flow controller.

35. (New) A hydraulically controlled fan drive system comprising:

(a) a housing assembly containing a hydraulic fluid; and

(b) an engaging circuit coupled to said housing assembly and comprising;

a first pitot tube coupled within said housing assembly and receiving at least a portion of said hydraulic fluid; and

a hydraulic fluid flow controller coupled to said first pitot tube;

(c) said engaging circuit engaging said housing assembly to a fan shaft in response to supply of said hydraulic fluid from said first pitot tube and variably

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controlling fluid pressure to said pitot tube via said hydraulic fluid flow controller;
and

(d) said hydraulic fluid flow controller selectively bypassing flow of
said hydraulic fluid to selectively prevent engagement of said fan shaft,